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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,246	07/31/2000	OSAMU WADA	106389	9837

25944 7590 07/24/2002

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EXAMINER

OSORIO, RICARDO

ART UNIT PAPER NUMBER

2673

DATE MAILED: 07/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/601,246

Applicant(s)

WADA ET AL.

Examiner

RICARDO L OSORIO

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-8, and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by McKnight (5,959,598).

Under claims 1 and 11, McKnight teaches of a color display device comprising a color light generation unit that repetitively generates a plurality of colored lights in a time sequence with a predetermined frequency (col. 12, lines 22-30 and col. 18, lines 20-22); and an image generation unit that processes said plurality of colored lights so as to generate an image corresponding to each of said plurality of colored lights generated in a time sequence (Fig. 6A and col. 18, lines 22-30), said predetermined frequency being at least 180 HZ (col. 18, lines 12-22).

Under claim 4, McKnight teaches of said color light generation unit comprising a light source (col. 12, lines 21-24), and a color filter that generates said plurality of colored lights from light coming from said light source (col. 18, lines 19-20).

Under claim 5, McKnight teaches of said color light generation unit comprising of light sources that emit colored lights different from each other and that turn on in a time sequence (col. 12, lines 22-51).

Under claim 6, McKnight teaches of said image generation unit being a reflected type electro-optical device (col. 14, line 64-col. 15, line 6).

Under claim 7, McKnight teaches of said electro-optical device being a liquid crystal device (col. 1, line 40).

Under claim 8, McKnight teaches of said electro-optical device being a digital micro-mirror device (col. 1, line 37).

Under claim 10, McKnight teaches of a projection display system (col. 1, line 34). Although, McKnight does not precisely mention of a lens for projecting the image, it is inherent for a projection display to have a lens that is necessary to project the image into the image projection panel.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKnight (see above).

Under claims 2-3 and 12-13, McKnight does not precisely teach of said predetermined frequency being 250 Hz or 300 Hz, However, McKnight teaches that said predetermined frequency begins at 180 Hz.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a frame frequency of more than 180 Hz, such as 250 Hz, or 300 Hz, in the device of McKnight because, since McKnight is suggesting that the frame frequency begins at 180 Hz, increasing the frequency would naturally be a choice of the user or designer to obtain a desired result.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over McKnight as applied to claims 2-3 and 12-13 above, and further in view of Richardson (5,113,332)

Under claim 9, McKnight fails to teach of said image generation unit comprising a transparent-type electro-optical device.

Richardson teaches of a transparent-type electro-optical device (col. 5, line 15).

6. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a transparent device, as taught by Richardson in the device of McKnight because transparent and reflective liquid crystal display devices are well known types of liquid crystal display devices that can be used alternatively one or the other (col. 1, line 60-col. 2, line 2).

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo Osorio whose telephone number is (703) 305-2248.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at 305-4938.

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9. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: (703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the Technology Center 2600 Customer Service
Office whose telephone number is (703) 306-0377.

Ricardo Osorio
July 22, 2002



BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600